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Please amend Claims 1 – 4, 14, 15, 19, 20, and 23 so that the pending claims read as follows:

- 1                   1.       (Amended) A method for verifying the purported identity of a  
2 target individual utilizing a number of authorization tissue spectral data from verified  
3 individuals having known identities, said spectral data having a plurality of measurement  
4 wavelengths, comprising the steps of:  
5                   obtaining target tissue spectral data from tissue of said target individual,  
6 said target tissue spectral data having a number of optical measurement wavelengths; and  
7                   positively verifying said target individual purported identity by  
8 comparison of optical spectral distributions of said authorization tissue spectral data and  
9 said target tissue spectral data.
- 1                   2.       (Amended) The method for verifying the purported identity of a  
2 target individual as recited in claim 1, wherein the method further includes calculating a  
3 difference between the optical spectral distributions of said target tissue spectral data and  
4 said authorization tissue spectral data.
- 1                   3.       (Amended) The method for verifying the purported identity of a  
2 target individual as recited in claim 2, further evaluating the difference calculated  
3 wherein said evaluation is done by a model that identifies between patients' differences.
- 1                   4.       (Amended) The method for verifying the purported identity of a  
2 target individual as recited in claim 2, wherein said differences are processed through a  
3 model to determine the significance of identified differences.
- 1                   5.       (As Filed) The method for verifying the purported identity of a  
2 target individual as recited in claim 1, wherein said number of authorization tissue  
3 spectral data is greater than one.

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1                   6.     (As Filed) The method for verifying the purported identity of a  
2 target individual as recited in claim 1, wherein said number of verified individuals is  
3 equal to one.

1                   7.     (As Filed) The method for verifying the purported identity of a  
2 target individual as recited in claim 1, wherein said number of verified individuals is  
3 greater than one.

1                   8.     (As Filed) The method for verifying the purported identity of a  
2 target individual as recited in claim 1, further comprising obtaining a number of  
3 authorization tissue spectra from an individual, said number of authorization tissue  
4 spectra being greater than two.

1                   9.     (As Filed) The method for verifying the purported identity of a  
2 target individual as recited in claim 1, wherein said target spectrum is added to said  
3 authorization spectra after said verification.

1                   10.    (As Filed) The method as recited in claim 1, wherein said number  
2 of measurement wavelengths is greater than four, further comprising calculating an inter-  
3 person spectral distance between said authorized spectra of said verified individuals at  
4 said wavelengths, wherein said wavelengths are selected at least in part to maximize said  
5 inter-person spectral differences.

1                   11.    (As Filed) The method as recited in claim 10, wherein said  
2 number of authorization tissue spectra is greater than four, further comprising calculating  
3 an intra-person spectral distance between said authorization spectra for an individual at  
4 said wavelengths, wherein said wavelengths are selected at least in part to minimize said  
5 intra-person spectral differences.

1                   12.    (As Filed) The method as recited in claim 1, wherein said tissue  
2 spectra include near-infrared wavelengths.

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1                   13.   (As Filed) The method as recited in claim 12, wherein said tissue  
2 spectra includes a substantial spectral contribution from subcutaneous blood.

1                   14.   (Amended) A method for verifying the purported identity of a  
2 target individual comprising the steps of:  
3                   obtaining a number of authorization tissue spectra from a number of  
4 verified individuals, said authorization tissue spectra having a plurality of measurement  
5 wavelengths, said verified individuals having identities;  
6                   obtaining a target tissue spectrum from tissue of said target individual,  
7 said target tissue spectrum having a number of optical measurement wavelengths;  
8                   performing discriminant analysis on optical spectral distributions of said  
9 target tissue spectrum and said authorization tissue spectra for said purported identity;  
10 and  
11                   positively verifying said target purported identity if, and only if, said  
12 discriminant analysis is satisfied.

1                   15.   (Amended) A system for verifying the purported identity of a  
2 target individual comprising:  
3                   an authorized database including near-infrared tissue spectra for a plurality  
4 of authorized persons;  
5                   means for obtaining a near-infrared tissue spectrum and purported identity  
6 from said target individual;  
7                   means for discriminating between optical spectral distributions of said  
8 target individual near-infrared spectrum and said authorized persons near-infrared  
9 spectra, utilizing said authorized person database and said target spectrum; and  
10                   means for indicating if said target individual purported identity is correct.

1                   16.   (As Filed) The system as recited in claim 15, wherein said  
2 discriminating means utilizes said target purported identity.

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1                   17.     (As Filed) The system as recited in claim 16, wherein said means  
2     for obtaining said target individual spectrum includes means for measuring near-infrared  
3     radiation reflected from subcutaneous tissue of said authorized individual.

1                   18.     (As Filed) The system as recited in claim 17, wherein said near-  
2     infrared spectra includes a plurality of measurement values, each associated with a  
3     wavelength, wherein said means for discrimination includes means for calculating a  
4     spectral difference between any of said spectra, and said means for discrimination  
5     includes means for selecting a plurality of said wavelengths, such that spectral  
6     differences between said spectra of said authorized persons is maximized.

1                   19.     (Amended) A system for verifying the purported identify of a  
2     target individual comprising:  
3                   a computer including an input device and an output device;  
4                   a database including near-infrared tissue spectra for a plurality of  
5     authorized persons;  
6                   means for obtaining a near-infrared tissue spectrum from tissue of said  
7     target individual, including a near-infrared radiation source for projecting near-infrared  
8     radiation subcutaneously and a near-infrared spectrometer for measuring dermal near-  
9     infrared intensity over a plurality of wavelengths; and  
10                  a program running in said computer for discriminating between optical  
11     spectral distributions of said target individual near-infrared spectrum and said authorized  
12     persons near-infrared spectra utilizing said authorized person database and said target  
13     spectrum.

1                   20.     (Amended) The system of claim 19, wherein said means for  
2     obtaining a near-infrared tissue spectrum includes an input element and an output element  
3     coupled to said tissue via an index-matching medium.